

ABSTRACT OF THE DISCLOSURE

A method and system are provided for inspecting electronic components mounted on printed circuit boards utilizing both 3-D and 2-D data associated with the components and the background on which they are mounted on the printed circuit board. Preferably, a 3-D scanner in the form of a solid state dual detector laser images the components and solder paste on the printed circuit board to obtain the 3-D and 2-D data. Then, a high speed image processor processes the 3-D data to find the locations of the leads and the solder paste. Then, the high speed image processor processes the 2-D data together with the locations of the leads and the solder paste to distinguish the leads from the solder paste. The high speed image processor may calculate centroids of feet of the leads, average height of the feet and border violation percentage of the solder paste.